

**FAIRCHILD AMPLIFIER CARD  
MODEL 692AA & 692AA/TXI**

**INTEGRA II SERIES**

**IB692AA/468**

**INSTRUCTION MANUAL**

## MODEL 692AA/692AA-TXI AMPLIFIER CARD

### DESCRIPTION

The MODEL 692AA (and the MODEL 692AA/TXI with input transformer is a single amplifier plug-in audio card, designed to provide amplification for microphone inputs, or for use as a booster or line amplifier. Fully silicon transistorized, the 692AA provides 18 dbm of output power into a 150 or 600 ohm load. It features compact packaging, low distortion, excellent S/N ratio and low power consumption. The card is 3 9/16" high by 5 1/2" long.

### CIRCUIT DESCRIPTION

The MODEL 692AA is a complementary symmetry Class AB circuit, providing output impedance of 3 ohms. The amplifier has direct coupling between stages, providing a minimum of 18 db of negative feedback. The amplifier is decoupled from the power supply by a diode and resistor, D1 and R5, in conjunction with capacitor C2.

Gain of the amplifier is controlled by means of variable feedback resistor, reducing distortion in minimum gain position. When the amplifier is supplied with input transformer, as in the case of the Model 692AA/TXI, the transformer is mounted directly on the board. (Recommended transformer for this application is the Beyer TR145/BV35570.) Mounting of the transformer on the board insures minimum noise pickup and minimum high frequency loss.

### INSTALLATION

The 692AA amplifier card can be used in conjunction with other 692 remote control equipments in the 692RM rack mount, or it can be mounted separately using the 692SCH single card holder. For rack mounting these card holders are accommodated in the 662RM rack mount frame.

### CONNECTIONS

PIN Z	(22)	+24V DC at 6 ma	
X	(20)		(high in 692AA)
W	(19)	INPUT TERMINALS	(low in 692AA)
S	(15)	OUTPUT - high	
P	(13)	-24V DC	AMP GROUND OUTPUT LOW

PRECAUTION: Precaution should be observed in locating the card in the system. When input transformer is mounted on the card, the amplifier should be mounted as far as practical from any strong magnetic field source.

Regardless of the shielding of the input transformer, there is a possibility of hum pickup affecting the overall performance of the amplifier in the system.

#### PERFORMANCE SPECIFICATIONS

GAIN ..... Without transformer from 22 to 51 db, continuously variable.  
With input transformer from 36 to 66 db.

FREQUENCY RESPONSE ..... From 20 to 20Khz  $\pm$  .5 db

DISTORTION (THD) ..... At +17.5 dbm out .35%

NOISE w/MAXIMUM GAIN ..... Without transformer 125 db input noise with open input.  
With transformer primary shorted, 136 db noise referred to input

POWER REQUIREMENTS ..... 24V DC at 6 ma maximum

INPUT IMPEDANCE ..... Without transformer greater than 100K.  
With transformer 200 ohms.

OUTPUT IMPEDANCE ..... 3 ohms (recommended load impedance  
150 ohms up, inductive or non-inductive)

POWER HANDLING CAPABILITY ... +18 dbm

#### WARRANTY & SERVICE POLICY

See standard warranty policy attached to and forming part of this manual. To validate warranty, complete and return the warranty registration card provided.

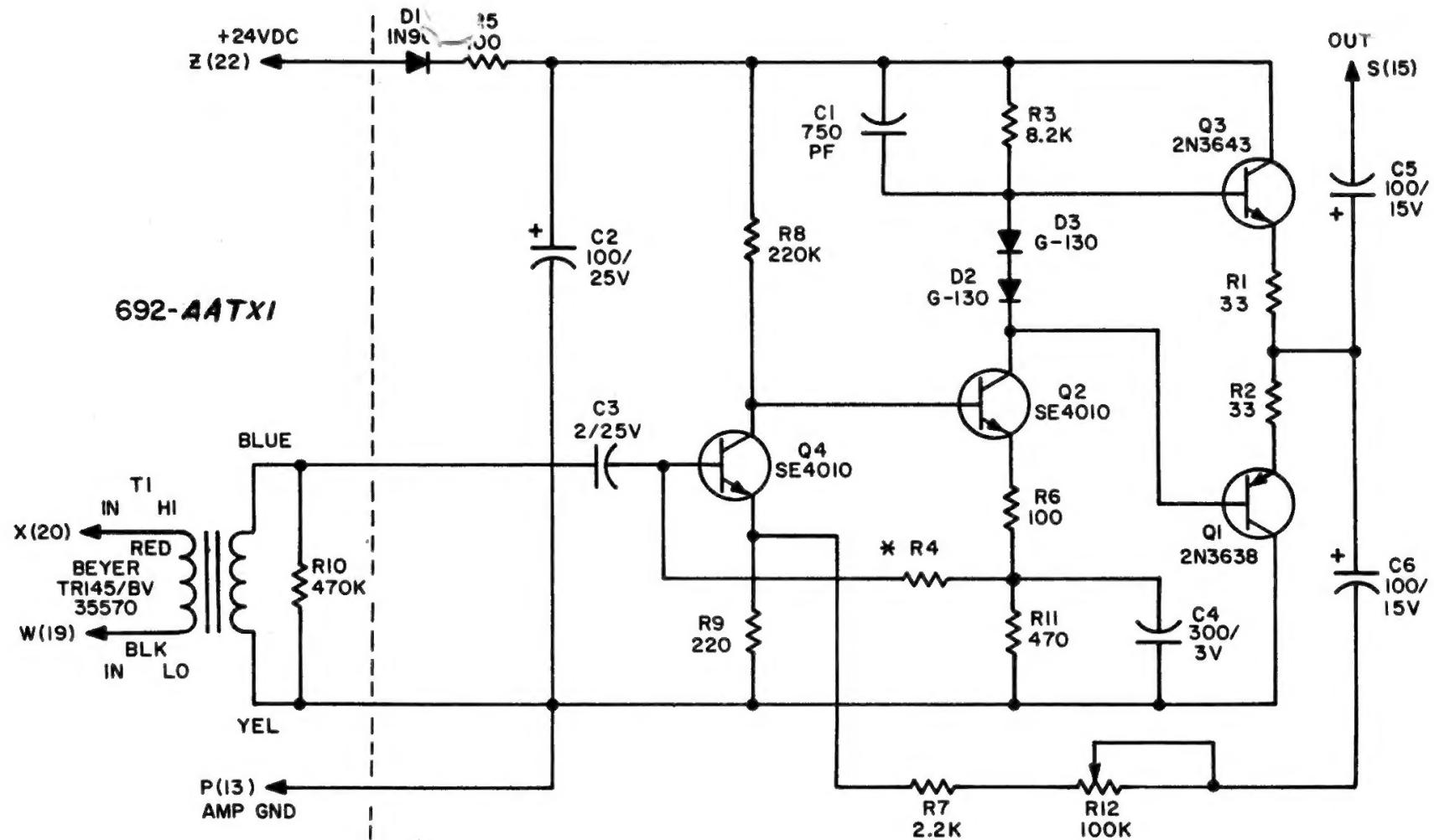
If there is any question on this or any other FAIRCHILD professional audio product, please contact the factory: FAIRCHILD SOUND EQUIPMENT CORPORATION, 10-40 45th Avenue, Long Island City, New York 11101.

When returning any FAIRCHILD professional product to the factory for service, include with the shipment a brief statement indicating reason for return to avoid unnecessary delays.

SCHEMATIC DIAGRAM 692AA - A96418

MOUNTING DIMENSIONS

WARRANTY & WARRANTY REGISTRATION CARD



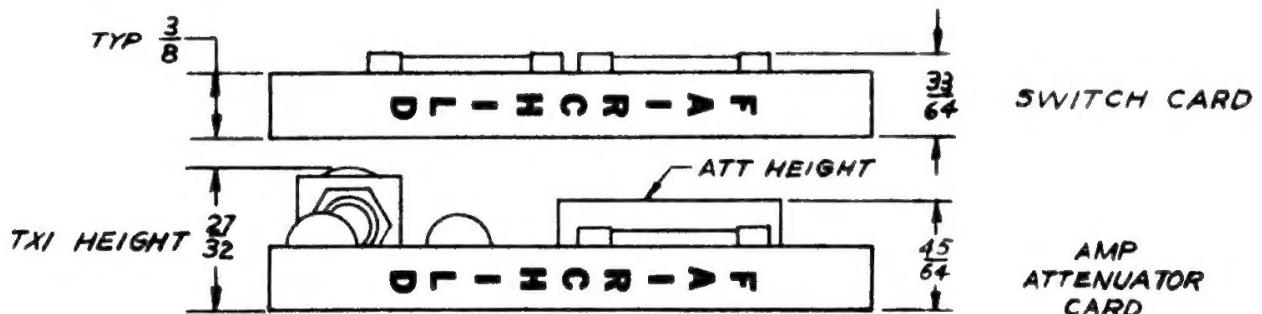
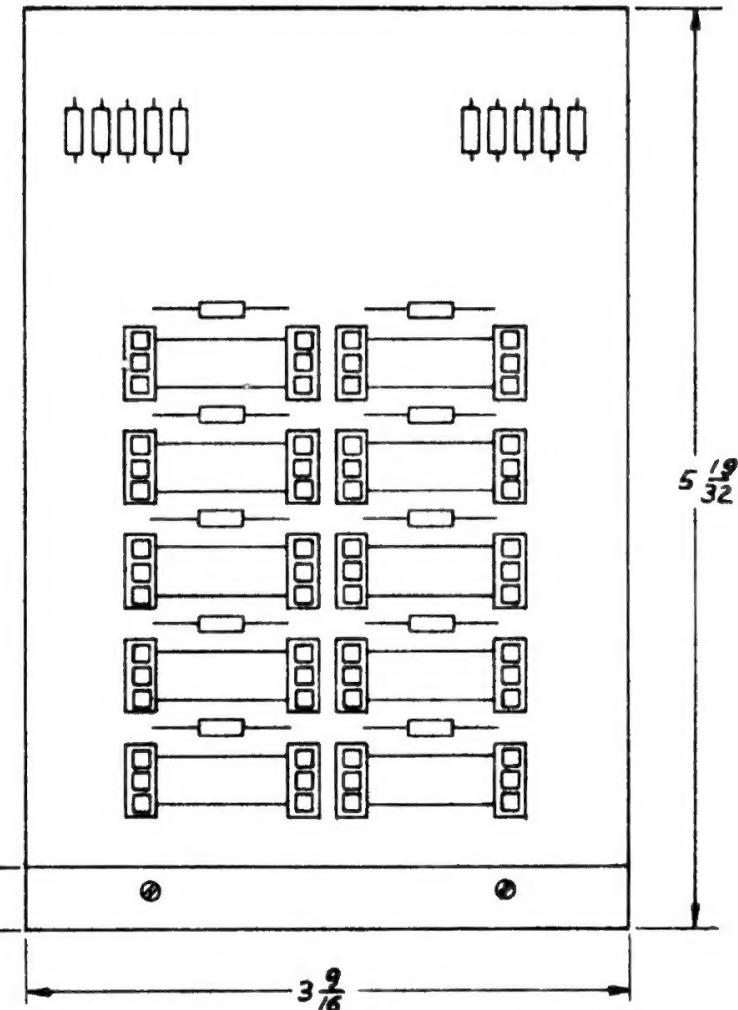
692-AA SCHEMATIC DIAGRAM

A-96418

9/11/69 S.K.

## INTEGRA II PC BOARD MOUNTING DIMENSIONS

AUDIO SWITCHER CARD USED AS AN  
EXAMPLE FOR LENGTH & WIDTH. ALL  
692 CARDS ARE IDENTICAL IN THESE DIMENSIONS.



A-96297